Application No.: 09/901,635

Examiner: Suhan Ni

Art Unit: 2643

AMENDMENT OF THE CLAIMS

1. (Currently Amended) A transducer, comprising a one-piece or multi-piece

piezoceramic disk having two radial surfaces and a membrane formed of a material

comprising an elastomer which attenuates sound vibrations, wherein one of the

radial surfaces of the piezoceramic disk is directly attached to the membrane with a

hard glue having properties that substantially transfer the vibrations of the

piezoceramic disk to the membrane.

2. (Original) The transducer according to claim 1, in which the membrane is

formed of a soft material.

3. (Original) The transducer according to claim 1, in which the membrane is

formed of synthetic material.

4. (Original) The transducer according to claim 1, in which the membrane

comprises a polymer.

Claim 5 (Canceled)

6. (Original) The transducer according to claim 1, in which the membrane

comprises a polypropylene.

7. (Original) The transducer according to claim 1, in which the membrane

comprises a composite material.

Claim 8 (Canceled)

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9. (Original) The transducer according to claim 1, in which a layer of metal is

provided on the membrane.

10. (Original) The transducer according to claim 1, in which the membrane is

provided with one or more circumferential grooves.

11. (Original) The transducer according to claim 10, in which the membrane

has two sides opposite to each other and the ceramic disk is attached to one side

while the groove or grooves are provided in the other side.

12. (Original) The transducer according to claim 10, in which the groove or

grooves have a depth of 90% of the thickness of the membrane.

13. (Previously Presented) The transducer according to claim 1, in which the

membrane is provided with at least one circumferential passageway extending

substantially through the entire thickness of the membrane, and the thus formed

membrane parts are mutually connected by means of adhesive tape.

14. (Original) The transducer according to claim 1, in which the membrane

has a circumferential edge, the transducer being connected at the circumferential

edge of the membrane to a frame, a housing of a device or similar by means of a

flexible glue.

15. (Previously Presented) The transducer according to claim 1, which is

formed by a housing of a device made of synthetic material, onto which the

piezoceramic disk is attached.

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- 16. (Previously Presented) The transducer according to claim 15, in which an opening is provided in the wall of the housing, at the location of the piezoceramic disk.
- 17. (Original) The transducer according to claim 13, including a suspension frame formed of a material which attenuates sound vibrations.
- 18. (Original) The transducer according to claim 17, in which the suspension frame has an L-shaped cross-section.
- 19. (Previously Presented) The transducer according to claim 17, in which the suspension frame has a U-shaped cross-section.
- 20. (Original) The transducer according to claim 1, wherein a frequency filter, formed by a plate with round openings therein, is provided in front of the transducer.
- 21. (Previously Presented) The transducer according to claim 1, wherein the piezoceramic disk defines a circumferential shape different than a circumferential shape of the membrane.